

ABSTRACT OF THE DISCLOSURE

- Bit lines and source lines are precharged to a power supply voltage before data read operation. In the data read operation, a corresponding bit line is coupled to a data bus as well as a corresponding source line is driven to a ground voltage only in the selected memory cell column. In the non-selected memory cell columns, the bit lines and the source lines are retained at the precharge voltage, i.e., the power supply voltage. No charging/discharging current is produced in the bit lines of the non-selected memory cell columns, that is, a charging/discharging current that does not directly contribute the data read operation is not produced, thereby allowing for reduction in power consumption in the data read operation.